REMARKS

Applicants certainly appreciate the indication of allowance of claims 6, 10-12, 14, 15, 17 and 18 if amended to become independent, incorporating the requirements of the base claims and any intervening claims. However, applicants prefer to not amend these claims to become independent as suggested by the examiner, because applicants submit the independent claims are allowable. Some of the claims are amended to better define the invention. Applicants also thank the examiner for not making the January 10, 2006 office action a final rejection.

Various claims of the application were rejected over Jensen, Pope, Gates, and Walling. Applicants submit that an important difference between what is claimed in this application and what is shown in these references is that applicants' rotary pump supplies well fluid to the primary piston to cause it to stroke. In these references, the rotary pump is located within a closed system that utilizes a clean hydraulic fluid or oil to the reciprocating piston. Thus, the primary piston in these references is stroked by hydraulic fluid, not well fluid. Maintaining a closed hydraulic fluid system for the reciprocating pump has a number of disadvantages over applicants' system, which employs well fluid as a pressure fluid.

Referring to the drawings of this application as an example, rotary pump 19 has a well fluid intake 21. The well fluid is discharged by rotary pump 19 through conduit 23 to sequencing valve 51, which directs the well fluid to the lower side of primary piston 39. The well fluid in the upper side of cylinder 28 exhausts out port 59 and conduit 33. At the same time, well fluid flows in intake line 81 into intake chamber 29 of the reciprocating pump. When at the top of the stroke, shown in Figure 4, sequencing valve 51 shifts to cause the discharge from rotary pump 19 to flow to the upper side of piston 39 to push it back downward. The well fluid

below piston 39 in cylinder 28 flows through port 63 to exhaust through conduit 33. Traveling valve 87 lifts to cause well fluid to flow above traveling valve 87.

In Jensen, rotary pump 156 and motor 158 (Fig. 2A) are located within a sealed chamber filled with hydraulic fluid. A reservoir 78 (Fig. 1) at the surface replenishes hydraulic fluid to rotary pump 56. In column 4, lines 46-48, it states that the control liquid can be any desired liquid, but preferably it is a clean filtered hydraulic oil such as used for hydraulic purposes in the industry. There is no suggestion that the system could employ well fluid for the rotary pump.

Pope discloses two hydraulic pumps 24 and 28 (Fig. 1), both driven by motors 10 and 26. Motors 10 and 26 as well as pumps 24 and 28 are immersed in hydraulic fluid in plenum 18. The well fluid for the reciprocating pump 30 is drawn in through port 46 and discharged through port 48 (Fig. 1). Column 4, line 68 through column 5, line 2, explains that the motor and pump are immersed in a suitable hydraulic fluid or oil.

Gates discloses a motor 2 connected to a gearbox 11 that drives a gear pump 12. The reciprocating pump, which includes piston 24, is driven by hydraulic fluid discharged from gear pump 12. Well fluid is drawn in through intake 53 and discharged out well fluid discharge 47. As explained on page 8, column 1, lines 60-66, pump 12 is supplied with a clean oil, not well fluid.

Walling discloses a rotary pump 50 (Fig. 12) that is rotated by motor 48. Pump 50 discharges a clean fluid received from a reservoir 96. The discharge of pump 50 leads through a valve 52 to opposite sides of a primary piston 54. The well fluid is pumped by secondary piston 56. The use of hydraulic fluid for pump 50 is mentioned at several places in the specification, including column 6, lines 12-25.

Claim 1 requires that the downhole reciprocating pump be operatively connected to the discharge of the rotary pump for receiving well fluid from the discharge of the rotary pump to cause the reciprocating pump to stroke. This requirement distinguishes over Jensen, Pope, Gates, and Walling because none shows a rotary pump that discharges well fluid into a reciprocating pump to stroke the reciprocating pump. Rather, these patents disclose rotary pumps that drive a reciprocating pump with hydraulic fluid that is kept separate from the well fluid. In addition, employing numerals for clarification, not for limiting purposes, claim 1 also requires a conduit 33 leading from the intake 81 of the reciprocating pump to a point below the well fluid intake 21 of the rotary pump 19. These references do not show this feature.

Claim 2 requires that motor 15 be located below well fluid intake 21 of rotary pump 19 and immersed in well fluid so the well fluid flowing to the well fluid intake 21 of rotary pump 19 flows past the motor for cooling the motor. This feature is not suggested by the references.

Claim 5 requires a downhole rotary pump having a well fluid intake. Claim 5 requires a sequencing valve operably connected between the drive piston of the reciprocating pump and the discharge of the rotary pump for alternately supplying well fluid discharged by the rotary pump to opposite sides of the drive piston. This feature is not shown in the four references cited.

Claim 8 requires a downhole rotary pump with a well fluid intake. It also requires a drive piston for stroking the reciprocating pump in response to well fluid discharged by the rotary pump. The four references do not disclose this feature.

Claim 9 requires a downhole rotary pump having an intake for receiving well fluid. The claim requires a sequencing valve for alternately supplying at least a portion of the well fluid discharged by the rotary pump to opposite sides of the primary piston for stroking the primary

and secondary pistons. This feature is not shown by the closed hydraulic fluid systems of the four patent references.

Claim 13 requires a centrifugal pump having an intake for receiving well fluid. It requires an electrical motor submersed in well fluid. The claim requires a shuttle valve that shifts between power and exhaust positions for alternately supplying at least a portion of the well fluid discharged by the centrifugal pump to opposite sides of the primary piston. These features are not shown in the four references.

Claim 16 requires that each of the rotary pump and reciprocating pump have an intake in fluid communication with well fluid in the well. It further requires supplying at least a portion of the well fluid pumped by the rotary pump to the reciprocating pump, and driving the reciprocating pump in response to the well fluid being supplied in the rotary pump. Claim 16 further requires flowing well fluid past the motor for cooling the motor while the reciprocating pump is being driven.

No fees should be due, but if there are any, please charge them to Baker Hughes Inc. deposit account 02-0429. It is respectfully submitted that the claims are now in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

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